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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,438	06/23/2003	Jonathan D. Goldstein	MS1-1467US	9407
22801	7590	02/24/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CORRIELUS, JEAN M	
			ART UNIT	PAPER NUMBER
			2162	
DATE MAILED: 02/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,438

Applicant(s)

GOLDSTEIN ET AL.

Examiner

Jean M Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-23 is/are allowed.
- 6) ☒ Claim(s) 1-6, 12, 13 and 24-31 is/are rejected.
- 7) ☒ Claim(s) 7-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/01/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the application filed on June 23, 2003, in which claims 1-31 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement filed August 1, 2003 complies with the provisions of 37 CFR 1.97 and MPEP § 609. It has been placed in the application file and the information referred to therein has been considered as to the merits. However, the IDS filed on December 10, 2004 has not been considered because the information provided therein is related to a different Application serial Number 10/ 602,437.

Drawings

3. Applicant is required to furnish the formal drawings in response to this office action. No new matter may be introduced in the required drawing. Failure to timely submit a drawing will result in ***ABANDONMENT*** of the application.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-13 are rejected 35 U.S.C. 101 because they are directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claim 1 defines non-statutory processes because it merely manipulates an abstract idea

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without a claimed limitation to a practical application. Data structure not claimed as embodied in computer-readable media is descriptive material per SE and is not statutory because they are neither physical nor statutory processes. Structural and functional interrelationship with a general-purpose computer for permitting claimed functions to be realized are not provided in the claims. In contrast, a claimed system should define structural and functional interrelationships between data structures or functional parts and a computer system which permit the data functions to be realized, and is statutory. Thus, the claimed are rejected as being non-statutory. Additionally, the invention, as claimed, is directed to the manipulation of an abstract idea with no practical application in the technology arts. The claim sets forth a method. The language of the claim does not transform the claimed subject matter into statutory subject matter. Clearly, the recital is merely a field of use or desired end of use limitation. Thus, the claim is lack a practical application in the technological arts. The claims are non-statutory as not being tangible embodied in the computer. Such computer hardware is required in order to manipulate the steps of the method claims. Applicant is advised to amend the claim by specifying the claim being directed to a practical application and being executed by a general purpose computer in order to correct the above indicated deficiencies.

The dependent claims 2-13 suffer of similar deficiencies of the base claims, as noted above.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 7 recites the limitation "wherein the act of" in line 1. There is insufficient antecedent basis for this limitation in the claim.

The dependent claims 8-11 suffer of similar deficiencies of the base claims, as noted above.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-6 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al., (hereinafter "Lee") US Patent No. 6,778,981.

As to claim 1, Lee discloses a method for similarity searches using a hyper-rectangle based on multidimensional space. In particular, Lee discloses the claimed "partitioning each dimension in a multidimensional (MD) feature space into a plurality of intervals" as segmenting a

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multidimensional data sequence to be partitioned into subsequences, wherein each subsequence represents by a minimum bounding rectangle generated from the multidimensional data sequence (col.4, lines 28-32; col.18, lines 34-35, lines 57-64); “identifying an interval in each dimension that overlaps a query point” (col.col.18, lines 35-36; col.22, lines 32-40; col.23, lines 25-28; col.24, lines 12-16); “finding one or more MD data objects coupled to the MD feature space that match all of the identified intervals” for finding subsequences similar to the given query sequence by obtaining sets of points contained in MBRs involved in a calculation of the distance from each sequence obtained using the distance (col.4, lines 40-45; col.17, lines 12-48); and “evaluating a first MD data object that matches all of the identified intervals to determine whether the first MD data object overlaps the query point” (col.5, lines 5-20; col.12, lines 32-67; col.14, lines 18-24; col.15, lines 40-52; col.22, lines 30-36).

As to claim 2, Lee discloses the claimed “wherein each MD data object comprises a hyper-rectangle” (col.21, lines 60-67).

As to claim 3, Lee discloses the claimed “wherein each MD data object is associated with a data item” (col.21, line 40-col.22, lines 20).

As to claim 4, Lee discloses the claimed “wherein each data item comprises a media data item” (col.21, line 40-col.22, lines 20).

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As to claims 5-6 and 13, Applicant stated (specification page 7, lines 5-8) that many different types shapes and size of MD data objects could be used without limitation. Lee disclosed the hyper-sphere space as a Euclidean space and as a hyper-cube shape (col.6, lines 63-64; col.21, lines 60-67; col.10, lines 63-67; col.12, lines 49-52).

As to claim 12, Lee discloses the claimed “wherein each MD data object is associated with a hyper-rectangle coupled to the MD feature space, and wherein the act of finding comprises comparing the query point with each hyper-rectangle that overlaps all of the identified intervals” (col.21, lines 15-28; col.20, lines 40-60).

As to claims 24-29:

The limitations of claims 24-29 have been mentioned in the rejection of claim 1. In addition, Lee discloses a computer readable medium and a search module (col.10, lines 13-27).

As to claims 30-31:

Claims 30-31 are computer readable medium for performing the method of claims 1-6 above.

They are, therefore, rejected under the same rationale.

Allowable Subject Matter

10. Claims 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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11. Claims 7-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. Claims 14-23 are allowable over the prior art made of record.

Reasons for Indicating Allowable Subject Matter

13. The following is an examiner's statement of reasons for allowance: Upon searching a variety of databases, the examiner respectfully submits that "for each interval, forming an associated data structure that indicates the MD data objects that match the interval; and processing each data structure associated with an identified interval to produce a set of MD data objects, each MD data object in the set matching each of the identified intervals" in conjunction with all other limitations of the dependent and independent claims, are not taught nor suggested by the prior art of record (PTO-1449 and 892).

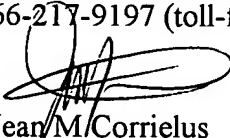
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M Corrielus whose telephone number is (571)272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean M. Corrielus
Primary Examiner
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February 16, 2005